

CUSTOMER NO.: 24498
Serial No. 10/527,956
Reply to Office Action dated: 06/17/08
Response dated: 08/25/08

PATENT
PU020426

Remarks/Arguments

In the Office Action, the Examiner stated that claims 1-27 are pending in the application and that claims 1-27 stand rejected. By this response, claim 17 is cancelled, claim 28 is added and claims 1, 14, 16 and 23 are amended to correct for inadvertent formality errors and to more clearly define the invention of the Applicants.

In view of the amendments presented above and the following discussion, the Applicants respectfully submit that none of these claims now pending in the application are anticipated under the provisions of 35 U.S.C. § 102 or rendered obvious under the provisions of 35 U.S.C. § 103. Thus, the Applicants believe that all of these claims are now in allowable form.

Rejections

A. 35 U.S.C. § 102

The Examiner rejected the Applicants' claims 1-4, 6, 8-25 and 27 under 35 U.S.C. § 102(e) as being anticipated by Takahashi et al. (U.S. 6,449,352, hereinafter "Takahashi"). The rejection is respectfully traversed.

The Examiner alleges that regarding claim 1, Takahashi teaches a method for providing video on demand playback including all of the elements of the Applicants' invention. The Applicants respectfully disagree.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." MPEP §2131, citing Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). The Applicants respectfully submit that Takahashi absolutely fails to teach, suggest or anticipate the invention of the Applicants, at least with respect to independent claim 1, which specifically recites:

"A method for providing video on demand playback,
comprising:

'receiving at a VoD player a plurality of program segments,
each corresponding to a fractional part of an entire program;

'receiving at said VoD player a key table containing packet count
information corresponding to the number of data packets contained in at least
one of said program segments; and

CUSTOMER NO.: 24498**Serial No. 10/527,956**

Reply to Office Action dated: 06/17/08

Response dated: 08/25/08

**PATENT
PU020426**

identifying an end point of at least one of said plurality of program segments by counting a number of data packets that are decoded for playback."

The Applicants submit that Takahashi does not teach or suggest, "receiving at a VoD player a plurality of program segments, each corresponding to a fractional part of an entire program; receiving at said VoD player a key table containing packet count information corresponding to the number of data packets contained in at least one of said program segments", as taught in the Applicants' specification and as claimed by at least the Applicants' claim 1.

For example, Takahashi does NOT include even one occurrence of the word "demand", let alone "video on demand" and "VoD", as recited in Claim 1. Hence, Takahashi fails to disclose this limitation of Claim 1. Moreover, "video on demand" is also recited in each of Claims 14, 16, and 23. Hence, Takahashi also fails to disclose this limitation of Claims 14, 16, and 23.

The Examiner cited Figure 21 of Takahashi for attempting to anticipate the features of the Applicants' claim 1. The Applicants disagree. Figure 21 of Takahashi corresponds to an MPEG transport stream, with Figure 21(c) simply showing a header of a TS packet, where the header includes a (continuity) counter. "The counter shows the sequence of TS packets having same PID. The counter is expressed in four bits, and is increased by one, returning to 0 after 15" (Takahashi, col. 1, lines 44-46). The counter shown in the header depicted in Figure 21(c) of Takahashi corresponds to the continuity counter 208 shown in the header of a TS in Figure 2 of the Applicants' specification. As is known, the continuity counter is, "used to determine if packets are lost or repeated" (Applicants' specification, p. 4, lines 2-3). Accordingly, the continuity counter is used in conjunction with the discontinuity indicator 211 "to help identify any discontinuity in the time base (PCR) and continuity_counter" (Applicants' specification, p. 4, lines 7-8). Thus, the continuity counter, according to the prior art, as shown in Figure 2 of the Applicants' specification and Figure 21(c) of Takahashi, is evaluated for discontinuities (i.e., gaps) in consecutive values thereof, which indicate discontinuities in the sequence of TS packets representative of, for example, lost or repeated packets.

CUSTOMER NO.: 24498**Serial No. 10/527,956**

Reply to Office Action dated: 06/17/08

Response dated: 08/25/08

PATENT**PU020426**

Hence, while Claim 1 explicitly recites, "a key table containing packet count information corresponding to the number of data packets contained in at least one of said program segments", Takahashi discloses a counter corresponding to a sequence of packets having the same PID for determining discontinuities in the sequence of packets. As is evident, packet count information corresponding to the number of data packets contained in at least one of said program segments does NOT correspond to a counter for determining discontinuities in a sequence of packets having the same PID. For example, as explicitly disclosed in Takahashi, the count value of the continuity counter shown in Figure 21(c) of Takahashi begins at zero for a first packet (Takahashi, col. 1, lines 44-46). Hence, in the case of one packet, the count will be off, since when one packet is included in the TS the count value will be zero, and one (corresponding to one packet) does not equal zero (corresponding to the first value in the range of values used by the counter). This mismatch occurs for values greater than one as well, given the initial value of zero for the in the range of values used by the counter. Moreover, while the packet count information is explicitly recited as corresponding to the number of data packets contained in at least one of said program segments, the continuity counter disclosed in Takahashi will reset and return to an initial value of zero after the count for the sixteenth packet is reached, as the values for the continuity counter are explicitly restricted to a range of zero to fifteen. Hence, in the case of more than sixteen packets, the continuity counter will be unable to express the correct number of packets due to the limited range of values provided for the continuity counter (although, as noted above, even for one packet or any number of packets, the value of the continuity counter will differ from the actual number of packets given that the range begins at zero). This resetting of the continuity counter after a count value of fifteen is of no consequence to the intended goal of the continuity counter, since only consecutive values are checked for, while such resetting renders the continuity counter completely unsuitable for use in accordance with the explicit claim limitations recited in Claim 1. Hence, Takahashi fails to disclose the preceding limitation of Claim 1 directed to receiving at said VoD player a key table.

Further, it is respectfully asserted that Takahashi does not teach or suggest the step of/means for, "broadcasting one or more earlier ones of said plurality of segments, that chronologically are intended to precede later segments in said program, more frequently than said later segments", as recited in Claims 14 and 23.

CUSTOMER NO.: 24498

Serial No. 10/527,956

Reply to Office Action dated: 06/17/08

Response dated: 08/25/08

**PATENT
PU020426**

The Examiner cited column 10, lines 32-38 of Takahashi as disclosing the preceding limitations of 14 and 23. The Applicants respectfully disagree.

For example, column 10, lines 32-38 of Takahashi disclose the following: "Thus, when generating TS packet, if containing sequence start code of image data, by setting the random access instruction flag always to 1, the multiplex data decoding apparatus judges presence or absence of sequence start code by random access instruction code, without having to search the content of the image data packet, and hence can control output".

As is evident, the cited portion of Takahashi does not even remotely teach or suggest the above reproduced limitations of Claims 14 and 23. For example, the cited portion of Takahashi makes no mention whatsoever regarding broadcasting any particular packets more frequently, let alone "broadcasting one or more earlier ones of said plurality of segments, that chronologically are intended to precede later segments in said program, more frequently than said later segments" as explicitly recited in Claims 14 and 23. Hence, Takahashi fails to disclose the preceding limitation of Claims 14 and 23.

Also, it is respectfully asserted that Takahashi does not teach or suggest, "means for receiving and storing a key table containing packet count information corresponding to a number of data packets contained in at least one of said program segments", as now recited in amended Claim 16. As noted above, Claim 16 has been amended to include the limitations of cancelled Claim 17.

The Examiner cited column 18, lines 12-20 of Takahashi as disclosing the limitations of 17 (now recited in amended Claim 16). The Applicants respectfully disagree.

Column 18, lines 12-20 of Takahashi disclose the following:

"stopping the input of the picture to a decoding apparatus when receiving the freeze command signal; and

'displaying an image corresponding to an intra-frame picture or an intra-field picture as a still picture, said intra-frame picture or an intra-field picture being input before receiving the freeze command signal.

'6. A data decoding apparatus for displaying an image corresponding to a decoded picture, said apparatus comprising:".

CUSTOMER NO.: 24498

Serial No. 10/527,956

Reply to Office Action dated: 06/17/08

Response dated: 08/25/08

PATENT

PU020426

The Applicants submit that the cited portion of Takahashi is completely silent with respect to the above reproduced limitations of Claim 16. For example, not even one occurrence exists in the cited portion of Takahashi of the words "count" or "number of data packets", let alone "means for receiving and storing a key table containing packet count information corresponding to a number of data packets contained in at least one of said program segments", as recited in Claim 16. Hence, Takahashi fails to disclose the preceding limitation of Claim 16.

Therefore, the Applicants submit that for at least the reasons recited above, independent claim 1 is not anticipated by the teachings of Takahashi and, as such, fully satisfies the requirements of 35 U.S.C. § 102 and is patentable thereunder.

Likewise, independent claims 14, 16 and 23 recite similar relevant features as recited in the Applicants' independent claim 1. As such, the Applicants submit that for at least the reasons recited above, independent claims 14, 16 and 23 are also not anticipated by the teachings of Takahashi and also fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

Furthermore, dependent claims 2-4, 6, 8-13, 15, 18-22, 24-25 and 27 and new claim 28 depend either directly or indirectly from independent claims 1, 14, 16 and 23 and recite additional features therefor. As such and for at least the reasons set forth herein, the Applicants submit that dependent claims -4, 6, 8-13, 15, 18-22, 24-25 and 27 and new claim 28 are also not anticipated by the teachings of Takahashi. Therefore, the Applicants submit that dependent claims -4, 6, 8-13, 15, 18-22, 24-25 and 27, and new claim 28 also fully satisfy the requirements of 35 U.S.C. § 102 and are patentable thereunder.

The Applicants reserve the right to establish the patentability of each claim individually in subsequent prosecution.

B. 35 U.S.C. § 103

The Examiner rejected the Applicant's claims 5, 7 and 26 under 35 U.S.C. 103(a), as being unpatentable over Takahashi, as applied to claims 1-4 above, and further in view of Obata et al. (U.S. 2001/0055318, hereinafter "Obata"). The rejection is respectfully traversed.

"To establish prima facie obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art" (MPEP §2143.03, citing *In re*

CUSTOMER NO.: 24498

Serial No. 10/527,956

Reply to Office Action dated: 06/17/08

Response dated: 08/25/08

PATENT

PU020426

Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974)). "If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious" (MPEP §2143.03, citing *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)).

Claims 2-13 depend from Claim 1 or a claim which itself is dependent from Claim 1 and, thus, include all the limitations of Claim 1. Claim 15 depends from Claim 14 and thus includes all the limitations of Claim 14. Claims 17-22 depend from Claim 16, or a claim which itself is dependent from Claim 16, and, thus, include all the limitations of Claim 16. Claims 24-27 depend from Claim 23, or a claim which itself is dependent from Claim 23, and, thus, include all the limitations of Claim 23.

That is, as recited above and for at least the reasons recited above, the Applicants submit that Takahashi absolutely fails to teach, suggest or anticipate the invention of the Applicants' claims 1, 14, 16 and 23. As such, and for at least the same reasons, the Applicants submit that Takahashi also fails to teach, suggest or anticipate the Applicants' claims 5, 7 and 26, which depend either directly or indirectly from the Applicants' independent claims 1 and 23.

The Applicants further submit that the teachings of Obata absolutely fail to bridge the substantial gap between the teachings of Takahashi and the invention of the Applicants. That is, the Applicants submit that there is absolutely no teaching, suggestion or disclosure in Obata for, "receiving at a VoD player a plurality of program segments, each corresponding to a fractional part of an entire program; receiving at said VoD player a key table containing packet count information corresponding to the number of data packets contained in at least one of said program segments", or "broadcasting one or more earlier ones of said plurality of segments, that chronologically are intended to precede later segments in said program, more frequently than said later segments", as taught in the Applicants' specification and as claimed by the Applicants.

Accordingly, the Applicants submit that claims 2-13, 15, 17-22, and 24-27 are patentably distinct and non-obvious over the cited reference for at least the reasons set forth above with respect to Claims 1, 14, 16, and 23, respectively.

New Claim 28

As noted above, new Claim 28 has been added. Support for new Claim 28 may be found at least at page 6, lines 3-24 of the Applicants' specification. It is respectfully asserted that none of the cited references, either taken singly or in

CUSTOMER NO.: 24498
Serial No. 10/627,956
Reply to Office Action dated: 06/17/08
Response dated: 08/26/08

combination, teach or suggest, "wherein the end point is identified when a count of a number of data packets that are decoded for playback and that correspond to the at least one of said plurality of programs equals the packet count information for the at least one of said program segments", as recited in Claim 28.

The Examiner has cited column 2, lines 7-18 of Takahashi as disclosing the above recited limitations of Claim 1 relating to identifying the end point. However, the cited portion of Takahashi further describes the conventional continuity counter shown in Figure 21(c) of Takahashi, and describes, *Inter alia*, the use of the discontinuity flag to indicate a discontinuity in the value of the continuity counter shown in Figure 21(c).

However, as noted above, the continuity counter according to the prior art, as shown in Figure 2 of the Applicants' specification and Figure 21(c) of Takahashi, as well as being described at column 2, lines 7-18 and column 1, lines 44-46 of Takahashi, is evaluated for discontinuities (i.e., gaps) in consecutive values, which indicate discontinuities in the sequence of TS packets representative of, for example, lost or repeated packets. That is, the counter in Takahashi compares a current count value (corresponding to a current packet) to a immediately preceding count value (corresponding to an immediately preceding packet) to determine if the two packets are the same (indicating a repeating packet), if they are consecutive (indicating a proper sequencing between the two packets), or if there is a gap (indicating a lost packet).

In contrast, the above reproduced step of Claim 28 recites, "wherein the end point is identified when a count of a number of data packets that are decoded for playback and that correspond to the at least one of said plurality of programs equals the packet count information for the at least one of said program segments".

Hence, at least one difference between the above reproduced step of Claim 28 and Takahashi is that Claim 28 is essentially comparing the count of the number of data packets that are decoded for playback and that correspond to the at least one of said plurality of programs to the packet count information for the at least one of said program segments, while Takahashi is comparing a counter value of a current packet with a counter value of an immediately preceding packet. Hence, Takahashi fails to disclose the preceding limitation of Claim 1 directed to identifying an end point.

CUSTOMER NO.: 24498
Serial No. 10/527,956
Reply to Office Action dated: 06/17/08
Response dated: 08/25/08

PATENT
PU020426

Conclusion

Thus the Applicant submits that none of the claims, presently in the application, are anticipated under the provisions of 35 U.S.C. § 102 or rendered obvious under the provisions of 35 U.S.C. § 103. Consequently, the Applicant believes that all these claims are presently in condition for allowance. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion, it is respectfully requested that the Examiner telephone the undersigned.

No fee is believed due. However, if a fee is due, please charge the additional fee to Deposit Account No. 07-0832.

Respectfully submitted,
Jill MacDonald Boyce et al.

By:


Jorge Tony Villabon, Attorney
Reg. No. 52,322
(609) 734-6445

JTV : pdf

Patent Operations
Thomson Licensing LLC
P.O. Box 5312
Princeton, New Jersey 08543-5312

August 25, 2008